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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,702	01/15/2004	Earl D. Webb	HES	8084
28857	7590	06/09/2005	2000-IP-001080UID3	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			EXAMINER BOMAR, THOMAS S	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/758,702

Applicant(s)

WEBB ET AL.

Examiner

Shane Bomar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,9-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 3,6,8 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/7/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 4, 5, 7, 9-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,907,649 to Bode.

Regarding claim 1, Bode discloses an apparatus comprising: an outer housing 20 or 100; an inner sleeve 44 or 107 disposed in the outer housing, the inner sleeve having open upper and lower ends, wherein an inner surface 47 or 67 of the inner sleeve curves radially inwardly from the upper end of the inner sleeve, so that the inner sleeve will inherently cause an interference fit with the cementing plug 50 or 72 when the cementing plug is received therein (see Figs. 2- 5, col. 3, line 36 through col. 4, line 18, and col. 4, line 19 through col. 5, line 28). When a cementing plug reaches the restriction provided by inner surface 47 or 67, the plug would inherently offer some resistance to rotation of the plug caused by drilling due to the different materials in the plug and the sleeve.

Regarding claim 2, the sleeve defines an innermost diameter 52 between the upper and lower ends, wherein the inner surface of the inner sleeve diverges radially outwardly in both upward and downward directions from the innermost diameter 52 (see Figs. 2 and 3).

Regarding claim 4, the inner sleeve is adapted to receive at least two cementing plugs, wherein the inner sleeve will inherently frictionally engage both of the cementing plugs to limit rotation of the cementing plugs during drillout thereof (see col. 5, lines 21-28 and col. 6, lines

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19-21 wherein it can also be seen from Fig. 5 that sleeves 106 and 107 could be considered to be one sleeve when holding two plugs).

Regarding claim 5, the inner sleeve 44 or 107 has multiple curvatures 47-49 or 67-68 on the inner surface thereof (see Figs. 2-5).

Regarding claims 7 and 12, Bode discloses an apparatus comprising: an outer housing 20 or 100 for connecting in a casing string 14; an inner sleeve 44 or 107 affixed to the outer housing, the inner sleeve having multiple curvatures 47-49 or 67-68 on an inner surface thereof, wherein each curvature extends radially inwardly to define a diameter having a magnitude less than a maximum diameter of the inner surface, and wherein the plug will be engaged by the inner surface at the innermost diameters defined by the curvatures to inherently limit rotation during drillout (see Figs. 2-5). When a cementing plug reaches the restriction provided by inner surface 47 or 67, the plug would inherently offer some resistance to rotation of the plug caused by drilling due to the different materials in the plug and the sleeve.

Regarding claims 9-11, and 15, the inner surface diverges radially outwardly from an innermost diameter upwardly and downwardly, curves radially inwardly from both the upper and lower ends, and diverges radially outwardly from an innermost diameter upwardly and downwardly (see Figs. 2 and 3).

Regarding claim 13, the inner sleeve is adapted to receive at least two cementing plugs (see col. 5, lines 21-28 and col. 6, lines 19-21 wherein it can also be seen from Fig. 5 that sleeves 106 and 107 could be considered to be one sleeve when holding two plugs).

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***Response to Arguments***

3. Applicant's arguments, see pages 5-6, filed 4/4/2005, with respect to the rejection(s) of claim(s) 1, 7, and 12 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bode.

***Allowable Subject Matter***

4. Claims 3, 6, 8, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent 5,178,214 to Bode shows curvature 50 on inner sleeve 33, but the curvature is caused by the cementing plug and is pushed in front of the plug, not engaged by it per se.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

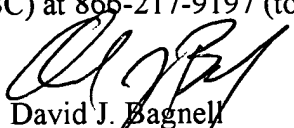
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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

tsb   
May 31, 2005